

United Engineering Company Shipyard,  
Inspection and Repair Shops

HAER No. CA-295-A

(United Engineering Company Shipyard, Sawtooth Building)  
(United Engineering Company Shipyard, Shop Building No. 61T)  
(Building No. 1)  
2900 Main Street  
Alameda  
Alameda County  
California

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PHOTOGRAPHS

WRITTEN HISTORICAL AND DESCRIPTIVE DATA

Historic American Engineering Record  
National Park Service  
Department of the Interior  
San Francisco, California

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## HISTORIC AMERICAN ENGINEERING RECORD

### UNITED ENGINEERING COMPANY SHIPYARD, INSPECTION & REPAIR SHOPS (United Engineering Company Shipyard, Sawtooth Building) (United Engineering Company Shipyard, Shop Building No. 61T) (Building No. 1)

HAER No. CA-295-A

**Location:** 2900 Main Street  
Alameda  
Alameda County  
California

U.S.G.S. 7.5 minute Oakland West, Calif. quadrangle.  
Universal Transverse Mercator Coordinates: 10.562480.418 2560

<b>Present Owners:</b>	074-0891-003	074-0905-001-04
	City of Alameda	Alameda Gateway Ltd.
	City Hall	2900 Main Street
	Alameda, CA 94501	Alameda, CA 94501

**Present Occupants:** Bay Ship & Yacht Co. and numerous smaller tenants

**Present Use:** Marine and industrial businesses

**Significance:** The Inspection and Repair Shops building is a contributing structure in the United Engineering Company Shipyard historic district that has been determined eligible for the National Register of Historic Places. The United Engineering Company Shipyard, established in 1941 to build and repair ships for the U.S. Navy, is the last surviving of several large World War II shipyards in Alameda. United Engineering built 21 tugboats and repaired hundreds of ships during the war. The facility was one of the largest employers in Alameda and played an important economic and social role in the city. In addition to its role as a principal building in the shipyard, this building was also the principal structure in a previous operation at this site — the West Alameda Yard of the Southern Pacific Company. The West Alameda Yard was developed in 1911 for the maintenance and repair of electric cars on the East Bay transit lines of Southern Pacific.

## PART I. HISTORICAL INFORMATION

### A. Physical History

1. **Date of erection:** the Inspection and Repair Shops building was constructed in 1910-1911.

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2. **Architects and engineers:** the original designers of the building in 1911 are unknown. Because none of the early drawings of the building were signed, they appear to be in-house products of the Southern Pacific Company.

Alben Froberg, an architect responsible for the design of many of the buildings at the shipyards in the early 1940s, created most of the plans and schedules for the alterations to the building in September of 1942. Froberg was a local architect from Oakland, California.<sup>1</sup> Froberg (1890-1968) graduated from the University of California in 1913. On 17 September 1915, he received license no. 874 to practice architecture in California. He lived and maintained his practice in Oakland. The Oakland Cultural Heritage Survey has records of about 30 buildings designed by Froberg, most of them industrial or commercial structures from the 1920s to 1940s. His best-known building was the Gray Shop, built in 1931 and demolished in the mid 1970s. The Gray Shop was a terra-cotta clad retail structure at 2000 Broadway in downtown Oakland. According to David Gebhard, it was an example of "the early Zigzag Moderne rendered with almost classical restraint." (p. 286)

3. **Original and subsequent owners, occupants, and uses:** The building called the Inspection and Repair Shops was the first building constructed by the Southern Pacific Company at the site. The building functioned as the repair facility for electric railroad cars used in the East Bay. Then, like now, the building was divided into three longitudinal bays. The north bay was used as the "Inspection Shop," the center bay was the "Repair and Machine Shop," and the southern bay was the "Paint Shop," workshop, and office section. The first floor of the workshop and office section housed a "Seat and Sash Washing Rm.," "Brass and Dipping Rm.," "Paint Rm.," "Paint Stock Rm.," "Stock and Receiving Rm.," "Substation," "Fire Proof Lockers," "Air Brake Repair Rm.," "Water Closets," and an "Armature Rm. And Electric Repairs." On the second floor a mezzanine with light wells overlooked the stockroom. East of these, the office section included a "Gen. Foreman's Office," a light well to the first floor, filing room, restroom, "Office Force" room, "Chief Clerk's Office," and "Supts' Office."<sup>2</sup>

In 1941, United Engineering purchased the yards and used the building for the construction of subships (pre-assembled ship components). Plans for the 1940s office addition show that the offices were used for the Purchasing and

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<sup>1</sup> Alben Froberg, architect, *Alterations & Additions, Offices for United Engineering Co. Alameda, CA.* (Oakland, CA, 2 September 1941).

<sup>2</sup> *Southern Pacific Co. Inspection & Repair Shops at West Alameda, California* (Alameda, CA, March 1910).

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Estimating Department and for "Navy Offices." The floor had men's and women's restrooms, and a separate restroom for navy men.<sup>3</sup>

The facility continued in use as a shipyard after World War II following the sale to new owners. In 1946, United Engineering sold the shipyard to Matson Navigation. In 1948, Matson leased the shipyard to Todd Shipyards Corporation, and in 1959, Matson sold the property to Todd.

Todd Shipyards used the north bay of the building as a plate shop, the central bay as a machine shop, and the southern bay and ell were divided into a joiner shop, diesel marine shop, electric shop, and machine shop.<sup>4</sup>

In the 1980s, Ted and Joe's Towing, a storage facility for wrecked cars, used much of the north bay of the building.<sup>5</sup> After Alameda Gateway purchased the property in October of 1983, the building was subdivided and rented to various tenants. Rosenblum Cellars moved into the building in 1987, and Bay Ship & Yacht Company first leased spaces in 1995.<sup>6</sup> The east section of the north bay is now vacant (soon to be leased to Bay Ship & Yacht Company) but was most recently used by Vortex Diving, an industrial scuba diving company. Currently, the sections of the building are leased to several different tenants including, Bay Ship & Yacht Company, Rosenblum Cellars Winery, St. George Spirits, Technical Services Group, and Direct Funeral Services, a crematorium.

Among the tenants, Technical Services Group, formerly the Technical Services Group of the Todd Shipyards, remains in the building and currently functions as an equipment calibration facility.

Over the years, the building has been called by various names. The 1909 plans for the building call it the "Inspection and Repair Shops."<sup>7</sup> Maps of the site prepared by the Southern Pacific Company in 1925, 1928, and 1941 labeled the building "car shops". By 1942 the building and yards were used as ship repair facilities, and the building was called "Warehouse Building #2." Another set of plans from the same year calls the building the "Machine Shop and Offices." On maps prepared in 1943 to 1984, different sections of the

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3 Froberg, sheet 3.

4 Todd Shipyards Corporation, San Francisco Division. *Shop Layouts: Electric Shop & Diesel Marine Shop* (San Francisco, CA, 29 December 1964).

5 Richard Krinks, Real Estate Division, Alameda Gateway Ltd. Interview by author, 26 October 2000. Alameda Gateway Complex, Alameda, CA

6 Ibid., 8 January 2001.

7 *Southern Pacific Co. Inspection & Repair Shops: West Alameda, California* (Alameda, CA, May 1909, retraced October 1909).

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building were labeled as if they were different buildings (e.g. plate shop, machine shop, and mold loft) and the whole building was not named. By 1994, the structure was known as the "Sawtooth Building, #61."<sup>8</sup> The Inspection and Repair Shops building has been subdivided and is currently leased to various tenants including Bay Ship & Yacht, Rosenblum Cellars, St. George Spirits, and Technical Services Group.

4. **Builder, contractor, suppliers:** the contractors for the original construction of the building in 1911 are unknown.

Plans for the 1941 office addition list the contractors as H.J. Christensen Co. and W.E. Lyons Construction Co., a local construction company in Oakland, California.<sup>9</sup> Christensen and Lyons both worked frequently on industrial projects with the architect, Alben Froberg.<sup>10</sup>

5. **Original plans and construction:** the original plans were drawn in May 1909 and retraced in October 1909.<sup>11</sup> The building was constructed as a combination one- and two-story structures in a shallow "L"-shaped plan. The massing of the building can be divided into three parts; a high central bay that runs east-west and two lower bays on either side.
6. **Alterations and additions:** the first major alteration to the Inspection & Repair Shops was the construction of additional offices in the 1940s. The new offices were built on the mezzanine in the southeast corner of the building next to the existing second-story offices. The new construction more than tripled the office space in the building. The first and second-story offices in the area leased to Technical Services Group were built in a more ad-hoc manner. Most rooms were constructed of wood frame covered with plywood. The upstairs offices were built on the concrete mezzanine.

The next major phase of alterations occurred in the 1990s after the current owner, Alameda Gateway, purchased the property. In order to accommodate multiple tenants, corrugated steel panels on steel frames were built to divide the sections. Large metal doors were installed in openings cut into the exterior walls for access. In addition, concrete floors were poured in many of the sections during these years.

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8 Insurance Recap and Allocation - All Properties." On file at Alameda Gateway Ltd., Alameda, CA April, 1995.

9 Froberg, sheet 3.

10 Betty Marvin, Oakland Cultural Heritage Survey. Personal Communication. 4 September 2001

11 *Southern Pacific Co. Inspection & Repair Shops: West Alameda, California.*

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When Rosenblum Cellars Winery moved into the building in 1987, they constructed wood frame offices and tasting rooms in what is now the bottling section. Later, the cellars expanded into neighboring spaces. In the southwest section of the building, Rosenblum built a new two-room office with a tasting room above and a refrigerated space in the opposite corner.

**B. Historical Context**

The Inspection and Repair Shops building was built in 1911 for the Southern Pacific Company. This large building housed repair shops for the electric railroad cars in the East Bay. In 1941, United Engineering purchased the yards and converted the facility to a shipyard. Shortly thereafter, the company secured contracts from the United States Navy to build tugboats for the war effort and later to repair larger ships. The building became a machine shop, plate shop, and mold loft for the shipyards. Although United Engineering was a private enterprise, during the war, its work was all for the U.S. Navy.

**PART II. ARCHITECTURAL INFORMATION**

**A. General Statement**

1. **Architectural character:** the Inspection and Repair Shops building is an unornamented industrial structure.
2. **Condition of fabric:** the interior spaces have been subdivided, but the building retains a high degree of the original fabric.

**B. Description of Exterior**

1. **Overall dimensions:** the Inspection and Repair Shops building is a large "L"-shaped structure. The north facade measures 460 feet, the west facade measures 198 feet 8 inches, and the east side measures 170 feet 28 inches. The ell projects from the south side of the building 28 feet and is 262 feet long. The building has a total area of 96,000 square feet. The building is divided into three bays that run east-west. The central bay is 54 feet tall, and the northern and southern bays are 47 feet tall.<sup>12</sup>
2. **Foundation:** the foundation and footings are made of reinforced concrete. The footings are located under the exterior and interior walls. The footings are 1 foot thick and 6 feet long, reinforced with three 3/8-inch bars.<sup>13</sup> The

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<sup>12</sup> *Southern Pacific Co. Inspection & Repair Shops: West Alameda, California, sheet 4.*

<sup>13</sup> *Southern Pacific Co. Inspection & Repair Shops at West Alameda, California, sheet 24.*

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building was designed with concrete piles under all areas of the building, but apparently the initial design was inadequate. Additional piles were added to plans on 14 January 1910, 3 February 1910, 17 February 1910, 15 March 1910 and 1 April 1910.<sup>14</sup> The March 1910 plan for the building shows that the piles were placed every ten feet in each direction.<sup>15</sup> Extra piles were built under the rails to support the heavy loads of the tracks. These piles were also made of concrete and were 18 inches by 20 inches reinforced with six pieces of 1-inch concrete bar.<sup>16</sup>

3. **Walls:** the exterior walls are covered with stucco. Signs hung or painted on the walls indicate the current tenants of the building. On the south ell of the building there are two signs for "Rosenblum Cellars Winery." In between the two is a sign for "St. George Spirits Fine Brandies." A sign on the west half of the north facade reads, "Bay Ship & Yacht Co." In addition each section has its function printed over the rolling metal doors: "Plate Shop," "Machine Shop," "Production Support," and "Receiving." The west facade also has a "Bay Ship & Yacht Co." sign and "Propeller Shop" painted over the northern door. The south end of this facade has a "Daily Wine Tasting 12:00 to 5:00" sign and a "Rosenblum Cellars Winery" sign. Vertical drainpipes divide the facades every two bays. Many of the walls also have pipes and electrical conduits.
4. **Structural system, framing:** the Inspection and Repair Shops building is steel-frame structure with reinforced concrete walls.

Steel I-beam columns on the inside of the walls support the roof. The channels of the I-beams have been filled with concrete. The columns in the exterior walls are 8 inches thick, and the columns in the interior walls are 12 inches thick.<sup>17</sup> These beams support steel trusses that run horizontally across the longitudinal bays. There is a horizontal truss between each of the large windows and one at the east end of the building for a total of twenty-four. Above these, there are more roof trusses that run lengthwise. These trusses are shaped like rows of inverted "V"s and support the monitors of the sawtooth roof.

The exterior walls of the building are made of 5-inch thick concrete reinforced with two ½-inch bars running vertically between each bay of windows. One ½-inch bar runs through the walls horizontally at 9 feet. The bars are 6 feet

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14 *Southern Pacific Co. Inspection & Repair Shops*, sheet 6.

15 *Southern Pacific Co. Inspection & Repair Shops at West Alameda, California*, sheet 14.

16 *Ibid.*, sheet 22.

17 *Southern Pacific Co. Inspection & Repair Shops: West Alameda, California*, sheet 4.

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long, and the joints of vertical and horizontal bars are overlapped 18 inches.<sup>18</sup>

The office section has a 1-foot thick concrete floor that rests on metal posts.<sup>19</sup> The 1940s addition west of the offices is built on a reinforced concrete floor slab reinforced with 3/8-inch diameter rods laid every eight inches one direction and eighteen inches the other. The walls are reinforced with 1/2-inch diameter rods laid at 1-foot intervals both ways.<sup>20</sup>

5. **Porches and stairs:** there are no exterior staircases. Although there are numerous doorways, there is only one porch. It is located on the south facade and provides access to the 1940s office addition. The porch is composed of pipe supports and a flat roof with wood siding. The landing is concrete. The porch shelters a single door and transom with windows on either side. In the nook of the south facade and ell, there is a metal ladder to the roof.

6. **Openings:**

- a. **Doorways and doors:** the building has a wide variety of doorways and doors from different periods of the building's history. The east facade has several of the very large, original doors from the Southern Pacific period. The pairs of massive doors are divided into segments by intermediate rails. The tops of the doors have three-by-three divided-light windows. The doors each have three iron-strap hinges. Below, infill is either diagonal or vertical planking. In each pair, the door on the right has a human-sized, paneled, half-glassed door. An original human-scaled door is also located on this facade. The door is a plank door with divided-light transom above. Also from this period, on the south facade of there is a pair of smaller, wooden, plank doors.<sup>21</sup> The doors are sliding and hang from a metal rail. Above, there is a metal shed roof from which hangs a "Technical Services Group" sign.

In the late 1980s and 1990s many of the window bays on the north facade of the building were replaced with large vertical-rolling metal doors. These doors have metal, hollow-core, human-scaled doors in the lower, right-hand corner. There are also smaller rolling, metal doors. Other parts of the building have wooden hollow-core doors.

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18 Ibid., sheet 24.

19 Froberg, sheet 4.

20 Ibid., sheet 3.

21 *Southern Pacific Co. Inspection & Repair Shops at West Alameda, California*, sheet 17.



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The placement of the doors is discussed as part of the fenestration pattern in the section "b. Windows."

- b. **Windows:** like the doors, there are a wide variety of window types reflective of the initial period of construction and subsequent alterations. The majority of openings are fitted with original windows. These are massive, tripled windows divided by wooden mullions. The muntins, sashes, and rails are also made of wood. Each of the tripled windows is made of a transom and a double-hung window. The transom is composed of four-by-three divided lights, and the windows are twelve-over-twelve divided lights. Most of the glazing is obscure or reeded glass; some lights have been replaced with plywood panels. These windows have concrete sills. Although there are many of these windows left, particularly on the north facade, a large number have been in-filled with cement stucco, metal panels, or enlarged and replaced with rolling metal doors.

The south longitudinal bay of the east facade is composed of two stories with four bays of openings. Each opening is fitted with a pair of six-over-six, double-hung wooden windows. The first two windows on the ground floor have been slightly altered; the lower half has been fitted with plywood. To the north of these openings on the first floor there is a single plank door with a divided-light transom above.

The east facade of the central longitudinal bay is north of the openings described above. This tall, one-story section has two rows of openings arranged in three bays. On the first floor there is one large and one small, metal, rolling door. To the right of these there is a tripled, divided-light window. On the second floor there are three of these windows. North of these on the east facade of the northern longitudinal bay there are three openings. The outer two have enormous wooden doors, and there is a metal rolling door in the center.

When constructed in 1911, the north facade had twenty-three identical openings with large, tripled windows. Over the years, the openings have been altered. Some have been refitted with plate glass, others truncated, and many were replaced with metal rolling doors. The first, third, and fifth are the original windows. The second opening has one of the original divided-light windows, but the right two-thirds have been filled with plywood. The fourth, eighth, eleventh, thirteenth, fifteenth, nineteenth, and twenty-first openings have been replaced

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with large, metal, rolling doors. Most of the windows retain their original wooden frames and sashes and some divided lights, but some of the divided lights have been replaced with plate glass. The sixth, seventh, ninth, tenth, twelfth, fourteen, sixteen, seventeen, eighteen and twentieth bays have original tripled windows with some of their divided lights replaced. Of these bays, the sixteen, seventeen, eighteen, and twentieth have bars over the lower portion of the windows. Bays twenty-two and twenty-three are unlike the others. They retain their original divided-light transoms, but the double-hung windows have been replaced with stucco.

Like the east facade, the west facade is divided into three sections, the northern, central, and southern longitudinal bays. The north section originally had three large wooden doors (like those on the east facade). These have been replaced with metal rolling doors. The central longitudinal bay has two rows of three bays. The bottom row has three metal rolling doors. The three openings above have been boarded over with fiberboard panels. The west facade of the southern longitudinal bay has a large, modern, divided-light aluminum window with a hollow-core door in the lower right-hand corner. To the south of these, there are two metal rolling doors and a bay filled with plywood.

Like the other facades, when constructed, the south facade had numerous uniform openings filled with sets of tripled windows. On this face of the building most of these have been altered or filled. Originally, on the south facade of the ell, there were thirteen openings. The first five have been filled with painted plywood panels. The sixth opening has also been filled, but a single metal door has been cut into the lower right hand corner. The seventh bay has been altered; the upper third of the former opening has been replaced with three sliding aluminum windows, the middle third has been in-filled, and the lower third has a wood plank door and two sliding aluminum windows. The eighth bay has a metal rolling door. The ninth opening is similar to the seventh but has three sliding windows in the lower third and no door. The tenth through thirteenth openings have been filled with plywood panels. The east facade of the ell has a single metal rolling door.

The south facade of the main section of the building has a complicated fenestration pattern. The first three bays originally had the large tripled windows. The first bay now has one set of double-hung

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windows and a transom. The transoms are extant, but the remaining two-thirds of the window have been replaced with a metal rolling door. The second bay has the original large tripled window. The opening in the third bay has been filled in the upper two-thirds and replaced with three wooden double-hung windows in the lower third.

Next, in the fourth bay, there is a pair of horizontal plank sliding doors. The doors slide on rails mounted on the exterior wall and appear to be original. The fifth bay is identical to the third. The division of the remainder of the buildings into two stories is reflected in the fenestration pattern. The second story windows have aluminum awnings. The second floor openings of the sixth and seventh bays have tripled, four-by-three, divided-light windows, which are hinged at the top. The window sashes were salvaged from the original building.<sup>22</sup> The first floor openings have four-by-two, divided-light windows grouped in threes. Some of the glazing in these windows has been painted. The second floor of the eighth bay has a tripled window like those of the sixth and seventh bays. The first floor of this bay has a hollow-core door with divided-light transom and is flanked by four-by-two awning windows. Finally, the last two bays originally had tripled windows. The windows were six-over-six divided light windows with wooden sashes. Those on the second floor remain, but the first floor windows have been replaced with plywood, a vent, and three-by-two, divided-light windows.

**7. Roof:**

- a. **Shape, covering:** the most identifiable features of the building, and those that have given it the name "Sawtooth Building," are the ranges of monitor windows on the roof. According to the plans for the building, the monitors are made of 3 1/2-inch thick concrete slabs reinforced with 3/8-inch reinforcing bar and 7-inch I-beam purlins.<sup>23</sup> The tall central longitudinal bay and the northern longitudinal bay each have twenty-one monitor windows. The south ell has twelve monitor windows, and the office portion has nine monitor windows (totaling twenty-one to match the other sections). Most portions of the building retain the original six-by-three, divided-light windows in the monitors. The northern longitudinal bay monitors have seven windows. The central bay has eight, the southern bay has seven, and the ell has an additional four. All monitor windows in the area of the

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<sup>22</sup> Ibid., sheet 4.

<sup>23</sup> *Southern Pacific Co. Inspection & Repair Shops at West Alameda, California*, sheet 3.

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building leased by Rosenblum Cellars (the southwest portion), have been blocked. The roofs appear to be covered with rolled asphalt strip roofing.

- b. **Cornice, eaves:** the building does not have overhanging eaves. Along the exterior walls of the northern and southern bays and around all four sides of the tall central bay, there are two rows of stucco coursing.
- c. **Roof and wall attachments:** on the east facade, two floodlights are located on the roof of the south longitudinal bay of the building. The tall central bay of this facade has a flagpole and a speaker. There is a refrigeration unit on the southwest corner of the roof. Along the south facade there are floodlights along the cornice.

**C. Description of Interior**

- 1. **First and second floor plans:** when constructed, the building was divided into three longitudinal bays running east-west, and a southern ell. The northern and central bays were composed of long spaces open from end to end. The southern bay housed several large spaces and an office section in the southeast corner. Reinforced concrete firewalls separated the three bays. When constructed the central bay was connected to the northern and southern bays only by fire doors. Over the years, the building has been remodeled and subdivided. In the 1940s, the office space in the southeast corner of the building was expanded and remodeled. In the 1990s, the open longitudinal bays were subdivided, and doors cut into the facades. The north bay has been subdivided into eight spaces, and the central bay and southern ell have been partitioned into three sections each.

Each of the eight sections in the northern longitudinal bay has a door and most have one or two sets of triple windows. All the doors are metal rolling doors except those to the eastern section, which are the large, original, wooden doors. Beginning at the east end, in the first three bays there is a vacant room, a private shipbuilder, and the Direct Funeral Services (DFS) Crematorium. The remaining five bays are leased to Bay Ship & Yacht Company and are used as: a plate shop, machine shop, product support, receiving, and a propeller shop.

The central bay is divided into halves. Bay Ship & Yacht Company leases the eastern half and uses it as a plate shop. In order to connect this section to the other Bay Ship & Yacht spaces in the northern bay, a large opening has been cut into the wall that divides the central and northern bays. The western half

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of the central bay is leased to Rosenblum Cellars. This half is subdivided into two spaces, which are connected by a large opening. The rooms are used for the storage of wine in barrels.

The southern longitudinal bay has the most complicated floor plan. The eastern half is composed of two-stories and is used as office space. Some of the offices were original, but this section of the building was significantly altered in the 1940s. Since then the section has been further remodeled leaving the office space in four sections. Those on the east end of the first floor were part of the original plan for the building. A workshop, supply room, several offices, locker room, and break room open into the large plate shop in the central bay.

West of these, there are offices and workrooms leased to Technical Services Group, a machinery recalibration company. The offices are accessible by doors on the south facade and connect to the second floor spaces by a stairway in the northeast corner. These spaces have been significantly altered over the last fifty years.

The rooms at the east end of the second floor originally housed the offices of the Southern Pacific Company. The offices are arranged around a hallway that runs north-south. The hallway is accessible from a stairway located inside the plate shop in the central bay. Along the east side of the hall there are four offices. Beginning at the north end of the west side of the hall, there is a large office, a vault, a copy room, restroom, and office. Plans for the building show that the large office and vault were extant in the 1940s but the spaces now used as a copy room, restroom, and end office were a second vault and a women's restroom and were accessible from a hallway on the west side of the rooms.<sup>24</sup>

When the building was constructed, west of the second floor offices there was a mezzanine that overlooked the workspaces below. In the 1940s, offices were constructed on the mezzanine, thereby more than tripling the second-story office space. These rooms are accessible from an entrance on the first floor of the south facade. The rooms are arranged around a hallway that runs east-west. Beginning at the east end of the south side, there is a men's restroom, staircase, women's restroom, and four offices. Along the north side of the hallway there is a large room with a sign "Baybee Jazz" on the door, a hallway that leads to the offices of Technical Services Group, two offices, another hallway to Technical Services Group, and an office. North of these

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<sup>24</sup> Ibid.

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rooms there are offices, which are used by Technical Services Group. The offices are arranged around a central room and are later additions.

West of the offices, the southern bay and ell is a single story and is composed of three large spaces. The easternmost section is leased to Rosenblum Cellars Winery and houses its bottling equipment and fermenting tanks. The two-story structure in the space once served as the office and tasting room for the cellars. This section is connected by a large opening in the northern wall to the Rosenblum spaces in the central bay. The second section was used by Rosenblum Cellars when the company first moved to the building, but has since been subleased to St. George Spirits. It houses the offices, stills, and storage area for the company. The western section is also used by Rosenblum and is connected to their spaces in the central longitudinal bay. This section houses its current offices, tasting room and storage tanks. The office structure is located in the northwest corner of the room and is a one-story structure with a tasting loft above. In the southwest corner of the room, there is a refrigerated room with a storage loft above.

2. **Stairways:** since most of the building is composed of one-story spaces, there are relatively few stairways. Many of those that now exist were added when the building was remodeled. In the vacant space in the northeast corner of the building, a stairway leads to the second story platform above the showers. The staircase (including balustrade, treads, and risers) is made of wood.

The only stairway that appears to be constructed as part of the original building is located in the plate shop in the central bay. The staircase leads to the offices on the second floor in the southwest corner of the building. The staircase is made of reinforced concrete and has a pipe handrail.

The stairway that leads from an entrance on the south facade to the second floor offices was added in the 1940s. Directly above there is another interior stairway that leads to storage areas on the third floor. The stairways are made of wood frame covered with plywood.<sup>25</sup> At the base of the stairway there is a small hexagonal lobby. The stairway and intermediate landing are covered with linoleum.

The office located in the bottling room of Rosenblum Cellars has a staircase near the north end. The staircase has wood balustrades covered with plywood, and stairs covered with carpet. In the westernmost space, a staircase on the south side of the office leads to the loft tasting room. The balustrades

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25 Ibid.

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are wood frame covered with plywood, and the stairs are covered with carpet. There is also a wooden stairway on the east wall of the refrigerated room.

3. **Flooring:** when constructed the building had 6-inch thick concrete floors with rails running east-west. Concrete repair pits located between the rails provided workers with access to the undersides of the rail cars.<sup>26</sup> In the section of the building used by a private shipbuilder the rails are visible.

When United Engineering turned the building into a shipbuilding and repair facility, hardwood floors were installed in some of the central and southern sections of the building. The wood floors were made of tongue-and-groove planks laid on the diagonal. To aid in production in the mold loft, shipbuilding templates and stations were painted on the floors. Most of the wood floors have been removed, but examples remain in the tasting room and office of St. George Spirits.

In the 1980s and 1990s, concrete floors were poured in some of the sections. It appears the earliest of these were installed flush with the rail lines and were scored with grid marks. These sections include the space now used as the bottling room for Rosenblum Cellars and the space used by St. George Spirits. The later, and majority, of the floors are thicker concrete (completely covering the rails) and were installed since 1995.<sup>27</sup> The difference in height between the concrete floors of the Rosenblum storage areas in the central bay and the floors of the bottling room and office section are about 6 inches. Cement ramps connect the rooms. Portions of the floors in the Rosenblum sections have been treated with a synthetic treatment to decrease slipperiness. These sections also have long trench drains.

All sections of the northern bay and the central bay have concrete floors except for the room used by the private shipbuilders, which has a dirt floor.

The four different sections of the offices mentioned above in section "1. First and second floor plans," have different floor treatments. In the southeast corner of the first floor, the workshop and offices have hardwood floors. Those in the workshop appear to be original and are badly deteriorated. The locker/break room and offices have concrete floors. West of these, the first floor office and workrooms of Technical Services Group have concrete floors. Most of the floors on the second story are covered with carpet or linoleum.

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<sup>26</sup> *Southern Pacific Co. Inspection & Repair Shops at West Alameda, California, sheet 3.*

<sup>27</sup> Krinks.

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4. **Wall and ceiling finish:** the interior walls that divide the three original longitudinal bays are made of reinforced, board-formed concrete. Some sections are painted. Walls installed in the last five years divide the north longitudinal bay into seven sections.<sup>28</sup> The walls are composed of a metal frame covered with corrugated, galvanized, metal sheeting. The wall that divides the central longitudinal bay into halves is made of drywall, most likely over a wood frame. Steel panels protect the lower five feet of the eastern side of the wall. The western half of the central bay is occupied by Rosenblum Cellars and is subdivided by a second wall. The wall is made of coated, fiberboard panels over a wooden frame.

The walls of the office portion of the building follow a different pattern. Beginning at the east end of the first floor, the walls of the workshop and office are clad in vertical planks. West of these, the locker/break room and offices have concrete walls and ceilings with concrete beams. The spaces used by Technical Services Group are next to these. The original walls, ceilings, columns and beams in this area are also made of reinforced concrete. However, this area has been subdivided into offices and smaller work areas, and the divisions are primarily built with wood frames and plywood sheathing. The row of offices at the east end of the second floor has reinforced concrete walls. The offices west of these were added in the 1940s and are made of wood frames covered with horizontal plywood panels and 1 1/4 inch battens.

5. **Openings:**

- a. **Doorways and doors:** when constructed, the northern and southern bays were connected to the central bay by a series of fire doors, and some of these still remain. The doors are made of wood planks covered with sheet metal panels. The doors slide on overhead rails. The tops of the doors and the overhead rail are slanted towards the opening, in order to allow the door to open in case of emergency, but to slide closed under their own weight to form a fire barrier. A sign on one of the doors in the plate shop in the central bay reads, "FIRE DOOR KEEP CLOSED AT ALL TIMES." Originally (aside from the doors of the office section of the building) these were the only interior doors. However, subsequent additions and partitions have increased the number and type of interior openings.

Aside from the fire doors, there are only two interior doorways in the north bay. In the vacant section in the northeast corner of the building,

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28 Ibid.



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the shower addition has a single, hollow-core door. A large opening was cut into the interior wall between the northern and central bays sometime in the 1990s. The opening connects Bay Ship & Yacht Company plate shops located in the north and central bays.

The plate shop at the east end of the central bay has several interior doorways. In addition to the opening mentioned above, it also has several openings along the eastern end of the south wall. There is a wooden door to the workshop, a pair of metal sliding doors to the supply room, and wooden door to the locker/break room.

To the west of these rooms, the offices used by Technical Services Group have either hollow core doors or half-glass doors. On the second floor, the offices at the east end have wood, paneled doors. Those in the 1940s addition to the west have wooden half-glass or paneled doors.

West of the office section, the bottling room of Rosenblum Cellars has several interior doorways. The office and tasting room addition from the 1990s has hollow-core and glass doors. A large opening has been cut in the north concrete wall. The opening connects the bottling room to Rosenblum's space in the central bay. The next section, which is leased to St. George Spirits, has several doorways to the office and tasting room in the southwest corner of the room. The doors are wood. Finally, Rosenblum's section in the southwest corner of the building has several interior doors. A large door has been cut into the concrete north wall. The opening connects this room to the storage room in the central bay. The office in the northwest corner has a half-glassed door. The refrigerated room has a wood, paneled, garage door.

- b. **Windows:** on the interior, the original, large, wooden windows have wood trim and a concrete sill. There are windows between the plate shop of the central bay and the workshop, supply room, and locker/break room in the south bay. Except for one window, which has been boarded over, the windows are three-by-three, divided-light windows with obscure glass and wood frames. Above these, on the second floor, there is a large bay window composed of four, double-hung, wooden windows. The window's view over the large central bay suggests that the office was used to monitor equipment and work.

The offices along the second floor of the 1940s office addition have plate-glass, wood-frame windows along the hallway. The offices in Rosenblum's bottling section, St. George Spirit's section, and

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Rosenblum's southwest section have sliding windows with aluminum frames.

6. **Decorative features and trim:** the interior spaces of the Repair & Inspection Shops building are utilitarian and have few decorative features or trim. The office section of the building has simple wooden floor and window trim. The offices and some of the interior openings of the sections used by Rosenblum Cellars have stained wood trim.
7. **Hardware:** most hardware appears to be modern and is of standard manufactured design.
8. **Mechanical equipment:**
  - a. **Heating, air conditioning, ventilation:** the office section of the building is heated by a steam heating system. Otherwise the building is not heated, and ventilation is passive.
  - b. **Lighting:** the building was wired with electricity at the time of its construction. In most sections of the building, the original incandescent lighting fixtures have been replaced with modern fluorescent lights. Some wall and hanging fixtures that appear to be from the 1940s or earlier are extant in the vacant section in the northeast corner of the building. All sections of the building leased to Bay Ship & Yacht and Rosenblum Cellars have modern, hanging, fluorescent lights. The office section has hanging fluorescent lights from the 1940s.
  - c. **Plumbing:** when constructed, the building had running water in all areas, a restroom in the office sections, and a drainage system.<sup>29</sup> Currently all areas of the building have running water, however there are few restrooms. In the vacant section of the north bay, there is an addition from the 1990s that houses a shower and restroom. Although the addition is fairly recent, the shower fixtures, sink, and toilet appear to be older and were likely salvaged.

The shower and locker rooms on the first floor of the office portion of the southern bay have modern fixtures but may be in the original location. Above, the restrooms were part of the 1940s addition. What is now the women's bathroom was created as the "Navy Men's Bathroom."

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- d. **Equipment:** as the Inspection and Repair Shop for the Southern Pacific Company, the building housed heavy equipment for repairing trains. Through subsequent remodeling and reuse, most has been removed. In several sections the rails are still visible (see "Description of Interior" section "2 Flooring"). The original massive overhead cranes are still extant in the northern and central bays. Until the bays were divided in the 1990s, the cranes ran the entire length of the buildings. The cranes' steel rails are mounted on the steel I-beams along the sidewalls.

One crane (that appears to be from the early 20th century) is located in the "Plate Shop" in the northern bay. The bridge and trolley are intact, but the crane does not appear to be in use. A sign on the trolley reads, "MAX CAP 5 TONS" and "NO-12CR-4." There is a second crane in the "Machine Shop" in the north bay. This larger crane (7 ½ ton capacity) has an intact bridge, trolley, and block and appears to be in working order. A third crane is located in the Plate Shop in the east half of the central bay. This crane is much higher than the other two. It appears to be composed of two crane assemblies, an older and a more recent installation. A sign on the bridge of the newer crane reads, "BRIDGE CAPACITY 5 TONS." A sign on the old trolley reads, "MAX CAP 10 TONS."

In addition to the large overhead cranes, some sections have swing arms. The steel swing arms are connected to the I-beams of the interior walls. It is not clear when these were installed. In the northwest corner of the space now used by Technical Services Group, there was a large oven. The oven has been removed, but the overhead crane rail that transported materials to the oven is still extant.

The 1940s office addition was built with two safes, which are still extant. The safes have steel doors and 8-inch thick concrete walls.

Many of the sections, especially those used by Bay Ship & Yacht and Rosenblum Cellars Winery, have a large amount of modern equipment. Those in Bay Ship & Yacht Company are welders, and other equipment used for working with and moving steel. In contrast, the Rosenblum Cellars Winery and St. George Spirits have seven to twelve hundred gallon fermenting tanks, oak barrels for the storage of wine and spirits, German stills, and bottling machines.

There are two electrical substations on the north side of the building. The first is located in front of the eighth bay. The equipment is housed

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in a steel container and appears to be from the 1990s. The second is located at the west end of the north facade. This substation is housed in a corrugated iron lean-to and appears to be from the 1940s. The transformers are located outside the structure and the switches and breakers are located within. Many interior sections of the building have conduits, breakers, and switches on the walls, which date from various periods of the building's history.

9. **Original Furnishings:** none extant.

**D. Site**

1. **General setting and orientation:** the Office Building is located in the center of the Alameda Gateway Complex. The building is surrounded by asphalt, and the activities of the interior spaces often spill out into the area surrounding the building. East of the building there is a laydown area where the steel beams used in the central plate shop are stored. The north side of the building is used for parking and for temporary storage for materials used by Bay Ship & Yacht. At the west end of the building there is a concrete ramp to the first bay, a new concrete pad in front of the second and third bays, and asphalt in front of the remainder of this side of the building. There is also a freestanding wooden deck and tables that Rosenblum Cellars uses as an outdoor tasting area. The south side of the building is used for the storage of grape containers and parking.
2. **Outbuildings:** there are four steel, rectangular storage containers: two on the south facade and two on the north facade. Adjacent to the west facade, there is an office trailer used by Bay Ship & Yacht Co.

**PART III. SOURCES OF INFORMATION**

**A. Original Architectural Drawings, Maps and Plans**

Alameda Gateway. *Existing Site Plan*. 30 January 1984.

*Alterations & Additions to Offices for United Engineering Company, Ltd.*  
Alameda, CA, 21 July 1942.

Braun, Peter, Associates. *Alameda Gateway Sawtooth Building Interior Improvements for*. Alameda, CA, 15 July 1997.

Edward K. Hussey Engineering Corporation. Survey No. 4050, plan. Prepared for United Engineering Company Ltd. 24 January 1942.

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Froberg, Alben, Architect. *Alterations & Additions, Offices for United Engineering Co. Alameda, CA.* Oakland, CA, 2 September 1941.

Kennedy, Clyde C., Engineering Office of. "Area Plan and Interceptor Profile: Improvements to Sewer System for Properties Occupied by Todd Shipyards Corp., Alameda, Calif." Prepared for Matson - United Properties, Inc. 9 August 1951.

Sanborn Map Company. *Insurance Maps of Alameda, California*, p. 93. New York: 1948.

*Southern Pacific Co. Inspection & Repair Shops at West Alameda, California.* Alameda, CA, March 1910.

*Southern Pacific Co. Inspection & Repair Shops: West Alameda, California.* Alameda, CA, May 1909, retraced October 1909.

Southern Pacific Company. Pacific Lines. West Alameda: Retire Trackage and Facilities, plan. 7 July 1941.

Southern Pacific Company. West Alameda Station Plan. April 1925; revised January 1928.

Todd Shipyards Corporation, San Francisco Division. *Shop Layouts: Electric Shop & Diesel Marine Shop.* San Francisco, CA, 29 December 1964.

United Engineering Company Ltd. *Alameda Shipyard, San Francisco Area*, Sketch No. 48. 10 February 1944.

United Engineering Company Ltd. *Alameda Shipyard: Map Showing Existing Facilities and Those Under Construction.* 22 October 1942.

**B. Early Views**

Technical Services Group, Alameda. Photograph Collection of Southern Pacific — United Engineering Company — Todd Shipyard Site. Various photographers including Clyde H. Sunderland (1945); Ralph Bird Photo (1942); Pacific Resources, Inc., Aerial Photographic Division (1970); Moulin Studios (n.d.); Todd Shipyards Corporation Engineering Department (1960); Pacific Aerial Surveys (1979); Jack Mittal (ca. 1968-1970), and [Southern Pacific Company] (1911.).

**C. Interviews**

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Donovan, Tim. Interview by author, 9 November 2000. Alameda Gateway Complex, Alameda, CA.

Krinks, Richard, Real Estate Division, Alameda Gateway Ltd. Interview by author, 26 October 2000 and 8 January 2001. Alameda Gateway Complex, Alameda, CA.

Marvin, Betty. Oakland Cultural Heritage Survey. Personal Communication. 4 September 2001

**D. Bibliography**

"Insurance Recap and Allocation – All Properties." On file at Alameda Gateway Ltd., Alameda, CA, April, 1995.

United Engineering Company Ltd. *Map of Alameda Shipyard Showing Existing and Proposed Additional Facilities*. Plan no. UEC-A-1-7. 14 June 1943.

Alameda County Recorder. Grant Deed. Matson Navigation Company to Todd Shipyards Corporation 6 March 1959, including List of Buildings, Fixtures, and Improvements.

United States. Army Corps of Engineers – San Francisco District and California. State Historic Preservation Officer. Memorandum of Agreement Regarding the Oakland Harbor Navigation Improvements Project, Alameda County, California. Signed 31 January 2001 and 22 January 2001.

Widell, Cherilyn, State Historic Preservation Officer. Letter to Richard G. Thompson, Lieutenant Colonel, San Francisco District, Corps of Engineers, Regarding Oakland Harbor Ship Channel Deepening and Improvements, Alameda County [Determination of Eligibility Concurrence]. 9 June 1998.

Thompson, Richard G., Lieutenant Colonel, San Francisco District, Corps of Engineers. Letter to Cherilyn Widell, State Historic Preservation Officer, requesting Determination of Eligibility. 30 April 1998.

**E. Likely Sources Not Yet Investigated**

Additional photographs in the collection of the Technical Services Group document the early years of the facility as a rail yard. Some of these photographs have been misplaced, but may turn up for future research.. In addition, photographs and other records about the West Alameda Yard of Southern Pacific

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may become available at the Western Railway Museum in Suisun City when a new building for their archives is completed.

**PART IV. PROJECT INFORMATION**

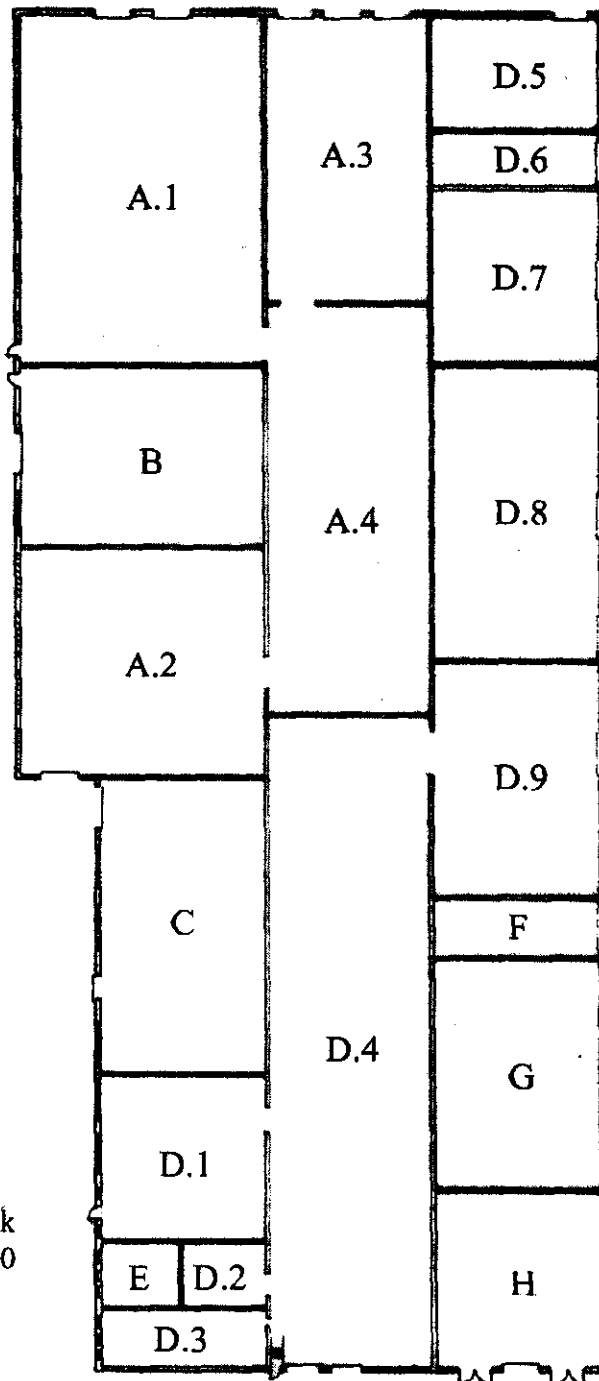
This report was prepared in for the U.S. Army Corps of Engineers and the Port of Oakland in accordance with a Memorandum of Agreement (MOA) between the U.S. Army Corps of Engineers, San Francisco District and the California State Historic Preservation Officer concerning the former United Engineering Company shipyard. The Port of Oakland and the City of Alameda were concurring parties to the MOA. The MOA was created because of a proposal by the U.S. Army Corp of Engineers in partnership with the Port of Oakland to sponsor the Oakland Harbor Navigation Improvements Project. This project "would deepen Oakland Harbor channels and berth areas from -42 feet mean lower low water (MLLW) to -50 feet MLLW, with 2 feet overdredge allowance" and widen some portions of the channels. These actions, which would constitute an Undertaking under Section 106, would result in the demolition of several buildings and structures at the former United Engineering Company Shipyard. Because the shipyard had been determined eligible for the National Register of Historic Places, the Undertaking would have an adverse effect on the property. Under the MOA, the following HAER documentation has been prepared: a written historic and descriptive report on the shipyard as a whole, seventeen separate reports on individual buildings and structures in the shipyard, including this report, and photographic documentation.

This building will not be demolished by the federal undertaking.

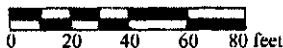
This report was prepared by Jody Stock, architectural designer, and Michael R. Corbett, architectural historian. Corbett was a subcontractor to Basin Research Associates of San Leandro. Basin Research was under contract to g. borchard & associates.

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- A. Rosenblum Cellars Winery
  - 1. Offices, Tasting Room, and Tanks
  - 2. Fermenting Tanks and Bottling
  - 3. Wine Barrels
  - 4. Wine Barrels
- B. St. George Spirits
- C. Technical Services Group
- D. Bay Ship & Yacht Co.
  - 1. Offices and Breakroom
  - 2. Supply Room
  - 3. Workroom (not in use).
  - 4. Plate Shop
  - 5. Propeller Shop
  - 6. Receiving
  - 7. Production Support
  - 8. Machine Shop
  - 9. Plate Shop
- E. Office
- F. Direct Funeral Services
- G. Private Shipbuilder
- H. Vacant



NORTH



prepared by Jody R. Stock  
 12/6/00

**BUILDING NO. 1: INSPECTION AND REPAIR SHOPS**

\*Plan is based on scaled drawing, Peter Braun and Associates, *Alameda Gateway Sawtooth Building Interior Improvements For* (Alameda, CA, 15 July 1997). The plan has been altered to reflect current field conditions. Walls which have been added after the 1997 plan are indicated with hashmarks and are not to scale.